6. Future of Water Infrastructure Management in the Border Area

After many years of growth in the border area spurred on by an agreeable climate and employment opportunities, the need for binational federal attention on protection of water quality and its effect on public health was recognized and the first steps taken. The La Paz Accord, signed in 1983 and the NAFTA side agreements, followed by creation of new binational infrastructure development institutions and appropriations from the Mexican and U.S. governments, have had a significant impact on the lives of those who live and work in the border area by protecting public health and improving surface water quality.

New long-term integrated planning mechanisms have been created and supported for the water infrastructure needs of the communities. Oversight, assistance in technology-sharing and funding, enhanced public participation in local governmental decisions and encouragement of binational communities to work out solutions based on the needs of all have been established.

At this time, at least 9 percent of the border populace is still without public water supply, as much as 23 percent are without wastewater collection and up to 40 percent without treatment of wastewater. The watersheds still need improvements in environmental and public health safeguards. Each community is making progress according to its own needs and abilities, but the work is considerably less than complete.

6.1 Summary of Near- and Long-Term Water and Wastewater Infrastructure Needs

Across all seven watershed basins, the estimated water supply and wastewater treatment infrastructure capital needs for communities and recognized tribes under consideration through the year 2020 in the U.S. part of the border area are estimated at $1.7 billion and for Mexico at $2.8 billion. The binational total of $4.5 billion is in addition to the current commitments shown in Table 5-1.

These needs are summarized by watershed basin in Table 6-1, with a breakdown between those in the U.S. and those in Mexico.

Table 6-1 Summary of Near- and Long-term Water and Wastewater Infrastructure Needs.

Basin	Near-term Needs ($millions)			Long-term Needs ($millions)		
	U.S.	Mexico	Total	U.S.	Mexico	Total
Pacific Coastal	95	26	121	232	593	825
New River	37	4	41	123	85	208
Gulf of California Coastal	0	26	26	0	162	162
Colorado River	133	51	184	216	222	438
NW Chihuahua	1	4	5	19	122	* 141
Rio Grande	42	222	264	517	1065	* 1644
Gulf of Mexico Coastal	34	16	50	229	219	* 386
Total	342	349	691	1336	2468	3804

6.2 EPA and Other Needs Estimates

A number of the border institutions, including the BECC and NADBank have made needs estimates for border water infrastructure development and those have been compared to the ones presented here. The results, as expected, are closely comparable because the same existing facilities and future population information were utilized for all the estimates. These population estimates were taken from the January 22, 1999, draft of a paper entitled *Population and Economics on the US-Mexico Border: Past, Present and Future* by James Peach, Professor of Economics and International Business, and James Williams, Professor of Sociology, both of New Mexico State University.

6.3 Next Steps

As part of the NAFTA negotiations, the U.S. and Mexican governments each pledged $700 million in grant funding to help make projects affordable in the border communities. EPA has received $550 million of these funds in appropriations to date (including FY 2001) which are being committed on both sides of the border. Mexican projects with an EPA share must provide a U.S. benefit. Based on these current estimates, the $700 million target from each nation will not complete the construction or upgrading of all communities water and wastewater facilities.

Expectations are that the border area communities will make progress on building the institutional capacity to operate, maintain, repair and build up the financial reserves to upgrade and enlarge their water supply and wastewater treatment facilities over the next 20 years. Each community would be expected to proceed on its own schedule related to the size and condition of existing facilities, other municipal priorities and the local economic situation.

Currently, funding for U.S. Border projects consist of community resources, borrowing from the NADBank or a State Revolving Funds and subsidies or grants from state and federal sources. The terms of each financing package are researched, analyzed and negotiated by the Bank. It is the expectation of both CNA and EPA that the communities will approach self-sufficiency as their institutional capacity increases, that rates and general fund allowances will rise to total operating and maintenance costs and that the work to build a complete modern infrastructure system for the existing populace will continue even after support from the federal agencies will have been completed. However, the regulatory roles which are now a part of the responsibilities of both federal agencies will continue in order to ensure that each border community operates its facilities adequately with its own resources, but it will take time, for this capability to develop. The U.S. and Mexican governments must determine how long and to what level to continue the current program to provide for the remaining existing needs and for development of future capacity.